

REMARKS

Claims 1-23 are pending in this application, with Claims 1-3, 5, 8-9 and 21 amended. The Applicants respectfully request reconsideration and review of the application in view of the amendments and the following remarks. By the foregoing amendments, no new matter has been added.

The Examiner rejected Claims 2-3 and 8-9 as being indefinite under 35 U.S.C. § 112, second paragraph, for lacking antecedent basis with respect to the term "said communicating instruction." The Applicants have amended the aforementioned claims, replacing the term at issue (i.e., "said communicating instruction") with a term having proper antecedent basis (i.e., "said program instructions"). Therefore, these rejections should be withdrawn.

Moreover, the Applicants have identified inaccuracies in Figure 5 of the present application, in that the "Yes" and "No" text associated with step 112 are reversed. Specifically, if the "Fields" identified in step 112 are valid (i.e., "Yes"), then step 116 is performed. If, however, the "Fields" are not valid (i.e., "No"), then step 114 is performed. Pursuant to 37 C.F.R. § 1.121, the Applicants hereby submit (as attached hereto), and respectfully request the Examiner to approve, a marked-up version of Figure 5 correcting the aforementioned inaccuracies. Upon the Examiner's approval of the marked-up drawing, the Applicants, in accordance with 37 C.F.R. § 1.84, will submit a formal version of Figure 5 incorporating the marked-up corrections.

Before addressing the merits of the rejections based on prior art, a brief description of the present invention is provided. The present invention is directed to a system and method of communicating RFID information to a particular destination computer system and/or a particular application program based on data stored in a memory device of an RFID transponder. Traditionally, RFID transponders ("RFID tags") are attached to objects (e.g., packages, vehicles, etc.) and are adapted to provide information to an RFID reader by backscatter modulating an RF signal provided by the

RFID reader. The information provided to the RFID reader may simply identify the object (e.g., through the use of unique identification data) or may include more detailed information (e.g., object-delivery data, account-balance data, etc.).

Traditionally, once the RFID reader has received the information, the information is then provided to an external software application to determine the nature of the information. For example, if the external application identifies the information as being database information, then the information is forwarded to a designated database application. Similarly, if the external application identifies the information as e-mail information, then the information is forwarded to a designated e-mail application. One drawback with such a system is that it requires an additional application (i.e., external software application) to determine the nature (i.e., destination and/or protocol) of the information.

The present invention overcomes this drawback by using data stored in the memory of the RFID tag to identify the nature of the information stored thereon. Specifically, the RFID reader is used to detect data stored in at least one designated field of the memory device that identifies a destination computer system and/or an application program (or a protocol thereof). This allows the RFID reader to forward the information directly to a desired destination and/or application, thus eliminating the need for an external software application. For example, in a preferred embodiment of the present invention, the detected data includes an IP address (identifying the destination computer system) and a port number (identifying an application program or a protocol thereof), thus enabling the RFID reader to route RFID tag information similarly to how data packets are routed over computer networks (i.e., using TCP/IP protocol). See page 6, lines 10-17 and page 9, lines 1-12.

The Examiner rejected Claims 1, 4 and 15 under 35 U.S.C. § 102(e) as being anticipated by McDonald (U.S. Pat. No. 6,211,781). The Examiner further rejected Claims 1-11 and 15-23 under 35 U.S.C. § 102(e) as being anticipated by Holtzman et al. (U.S. Pat. No. 6,400,272). These rejections are respectfully traversed.

McDonald discloses a system and method of tracking and locating a moveable object including an RFID tag. Col. 1, lines 49-52. Specifically, an RFID reader associated with a particular location is used to interrogate (i.e., read) an RFID tag. In response, the RFID tag provides the RFID reader with a unique identification code (i.e., a code that identifies the object attached thereto). Col. 3, lines 7-10. The RFID reader then forwards this unique identification code, together with a unique receiver code (i.e., identifying the RFID reader, and thus its location), to a host computer where the information is stored. Col. 3, lines 1-18; col. 6, lines 48-64. Thus, by placing various RFID readers at discrete locations along an object's route (e.g., a mail route), an object including an RFID tag (e.g., mail) can be tracked via the host computer.

As opposed to the present invention, McDonald does not disclose storing data in the RFID tag's memory to identify the manner (i.e., destination and/or protocol) in which the RFID tag's information is to be transmitted. Instead, McDonald discloses that the only information stored in, and provided by, the RFID tag is unique identification code (i.e., RFID information identifying the object attached thereto). See col. 1, lines 49-59; col. 3, lines 7-10. This is because the RFID readers disclosed in McDonald are only adapted to forward the received information in one particular manner -- i.e., to a host computer and for use in a database application operating thereon. See col. 6, lines 48-64. In contradistinction, an RFID reader operating in accordance with the present invention is adapted to transmit RFID information in multiple manners -- i.e., to multiple destinations and/or to multiple applications. Thus, it is clear that McDonald does not disclose transmitting RFID information **in accordance with** data stored on, and provided by, the RFID tag.

More particularly, McDonald fails to disclose an RFID reader comprising: "a radio module; a processor ...; and a memory coupled to said processor and having program instructions ... including: detecting data loaded in said at least one designated field of a memory of said at least one RFID tag; determining processing information from said detected data; and communicating information stored on said at least one RFID tag to

external systems connected to said RFID reader in accordance with said processing information." Therefore, the Examiner's rejection of independent Claim 1, as well as Claim 4, which depends therefrom, should be withdrawn.

Furthermore, because McDonald also fails to disclose a computer network comprising: "a server having a plurality of application programs operating thereon; at least one client computer connected to said server; and an RFID reader connected to said server and being adapted to communicate with RFID tags ..., said RFID reader providing a data packet to said server, said data packet being directed to one of said plurality of application programs selected in accordance with data stored in said at least one designated field of said one of said RFID tags," the Examiner's rejection of independent Claim 5 should also be withdrawn.

Holtzman discloses a system and method of using a database application and data stored on an RFID tag to determine a user's access criteria to network information. Specifically, an RFID reader is used to interrogate (i.e., read) an RFID tag. In response, the RFID tag provides the RFID reader with unique identification information (e.g., data identifying the RFID tag, the user's username, password, PIN, etc.). Col. 3, lines 3-7; Col. 9, lines 59-62. The RFID reader then provides this information to a database application to determine the user's access criteria (i.e., what network information the user has access to). Col 5, lines 6-14. The database application, or more particularly a dispatch module in communication with the database application (see Figure 2, Ref. No. 82), performs at least one action in accordance with the user's access criteria (e.g., permitting the user to resume a previous session, loading a particular web page, loading a filter program, etc.). See e.g., col. 5, lines 21-28 and lines 45-63; col. 6, lines 25-30; col. 10, lines 45-49; and col. 12, lines 27-35. Thus, Holtzman discloses (i) retrieve information from an RFID tag (e.g., unique identification information), (ii) provide the received information to an external database application, (iii) using information stored on the external database application to determine the user's access criteria, and instructing a dispatch module to perform at least one action in accordance with the

user's access criteria.

In an alternate embodiment, Holtzman further discloses providing reader identification information (i.e., to identify the RFID reader, and thus its location) together with the unique identification information (i.e., to identify the RFID tag, and thus its user) to the database application. Col. 5, lines 11-20. This enables the database application to determine access criteria (and thus enables the dispatch module to perform a particular action) in response to a particular user **and** a particular location. Col. 13, line 64 – col. 14, line 24. For example, a user located at an airport may receive different information than if the user were located at work.

Holtzman further acknowledges that different RFID tags transmit data differently. Col. 3, lines 40-56. For example, according to Holtzman, the Marin 4100 series RFID tag produces a data packet that is forty-five bits long, whereas the Marin 4050 series RFID tag produces a data packet that is fifty-four bits long. Col. 8, lines 52-55. Therefore, in one embodiment, the RFID reader disclosed in Holtzman is further adapted to monitor the information received from the RFID tag (e.g., unique identification information, etc.) in order to identify the RFID tag's "tag type." Col. 8, lines 22-38. This enables the RFID reader (or the database application) to properly decode the information received from the RFID tag.

Holtzman, however, does not disclose using data stored on an RFID tag to identify the manner (i.e., destination and/or protocol) in which the RFID tag's information is to be transmitted. At most, Holtzman discloses using information stored on the RFID tag to interpret the information received from the tag, not to determine the manner in which the information is to be transmitted. This is because the RFID reader disclosed in Holtzman is only adapted to forward the received information in one particular manner -- i.e., to a main memory device and for use in a database application operating thereon. See Figure 2. In contradistinction, an RFID reader operating in accordance with the present invention is adapted to transmit RFID information in multiple manners -- i.e., to multiple destinations and/or to multiple applications. Thus, it is clear that Holtzman

does not disclose transmitting RFID information **in accordance with** data stored on, and provided by, the RFID tag.

More particularly, Holtzman fails to disclose an RFID reader comprising: "a radio module; a processor ...; and a memory coupled to said processor and having program instructions ... including: detecting data loaded in said at least one designated field of a memory of said at least one RFID tag; determining processing information from said detected data; and communicating information stored on said at least one RFID tag to external systems connected to said RFID reader in accordance with said processing information." Therefore, the Examiner's rejection of independent Claim 1, as well as independent Claims 15 and 21, which contain similar limitations (i.e., "processing said information from said RFID tag **in accordance with** said identifying data" and "storing at least one **destination address identifier** ... and a **protocol identifier.**"), should be withdrawn. Furthermore, the Examiner's rejection of Claims 2-4, 16-20 and 22-23, which depend therefrom, respectively, should be withdrawn.

Moreover, because McDonald also fails to disclose a computer network comprising: "a server having a plurality of application programs operating thereon; at least one client computer connected to said server; and an RFID reader connected to said server and being adapted to communicate with RFID tags ..., said RFID reader providing a data packet to said server, said data packet being directed to one of said plurality of application programs selected in accordance with data stored in said at least one designated field of said one of said RFID tags." Therefore, the Examiner's rejection of independent Claim 5, as well as Claims 6-11, which depend therefrom, should be withdrawn.

The Examiner also rejected Claims 12-14 under 35 U.S.C. § 103(a) as being unpatentable over Holtzman in view of McDonald. However, because both Holtzman and McDonald fail to disclose the same limitation of Claim 5 (i.e., providing data to an application program selected "in accordance with" data stored on the RFID tag), these two references cannot be combined to render Claim 5 obvious. Therefore, because

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Claims 12-14 depend from Claim 5 and include each limitation identified in Claim 5, this rejection should be withdrawn.

In view of the foregoing, the Applicants respectfully submit that Claims 1-23 are in condition for allowance. Reconsideration and withdrawal of the rejections is respectfully requested, and a timely Notice of Allowability is solicited. To the extent it would be helpful to placing this application in condition for allowance, the Applicants encourage the Examiner to contact the undersigned counsel and conduct a telephonic interview.

To the extent necessary, Applicants petition the Commissioner for a one-month extension of time, extending to June 9, 2003 (the first business day following June 7, 2003), the period for response to the Office Action dated February 7, 2003. The Commissioner is authorized to charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-0639.

Respectfully submitted,



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Enclosure: Proposed Amended Drawing

APPROVED ON

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FIG. 4

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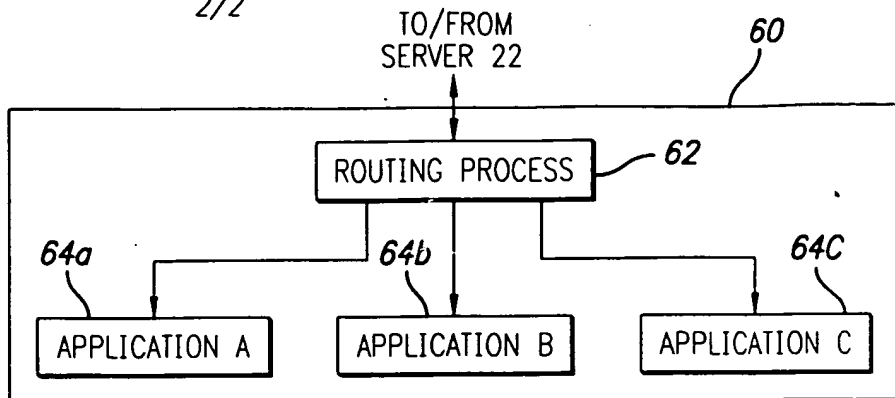


FIG. 5

